

## PATENT ABSTRACTS OF JAPAN

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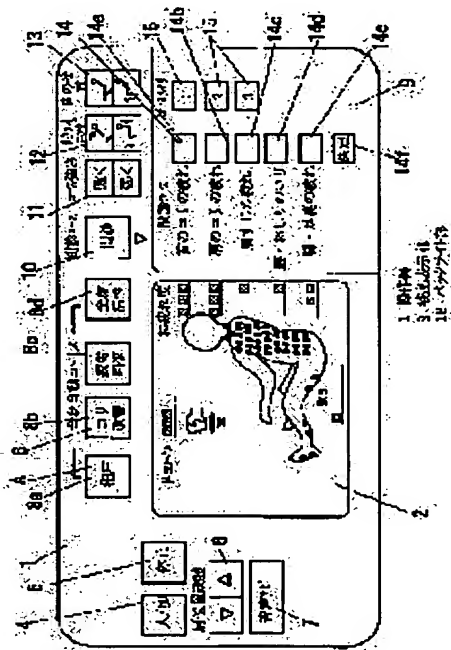
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## (54) OPERATION UNIT FOR MASSAGE MACHINE

## (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide the operation unit for massage machine enabling a treating person to visually confirm and easily understand the operation state by light-emitting the color of the backlight part of the operation unit separately for every mode.

**SOLUTION:** The massage machine is provided with a plurality of operation modes such as an automatic course mode performing a plurality of preset operations, a preferred operation mode performing a preferred fixed operation, an examination interview course mode selecting the operation by inputting the body conditions of the treating person and a memory operation mode performing a preset and stored operation, and the operation unit 1 is provided with an operation button A, a liquid crystal display part 2 and the backlight part 18 of the liquid crystal display part 2. The backlight part 18 switching many colors and lighting the entire surface of the liquid crystal display part 2 is disposed on the back of the liquid crystal display part 2 and the color of the backlight part 18 is changed for every operation mode.



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## CLAIMS

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### [Claim(s)]

[Claim 1] The automatic course mode in which two or more actuation set up beforehand is performed, and the liking mode of operation which performs favorite fixed actuation, free medical treatment -- the oral consultation course mode in which actuation is chosen by inputting a person's condition -- In the massage machine which has two or more modes of operation, such as a memory mode of operation to which the actuation which set up beforehand and was made to memorize is made to perform, and equipped the actuation machine with the back light section of an operating button, the liquid crystal display section, and the liquid crystal display section The actuation machine of the massage machine characterized by arranging in the flesh side of the liquid crystal display section the back light section which carries out multicolor change lighting of the whole surface of the liquid crystal display section, and changing the color of the back light section according to two or more above-mentioned modes of operation.

[Claim 2] The actuation machine of the massage machine according to claim 1 characterized by having the memory mode of operation which can memorize actuation, and changing the color of the back light section for every stored data according to an individual etc

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## DETAILED DESCRIPTION

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### [Detailed Description of the Invention]

#### [0001]

[Field of the Invention] This invention relates to the structure of an actuation machine of having the liquid crystal display section which displays operating state, in detail about the actuation machine of a massage machine.

#### [0002]

[Description of the Prior Art] the actuation machine of a recent-years and massage machine -- setting -- activity and free medical treatment -- although there are some which prepared the liquid crystal display section which displays a child's successive range, a location condition, a preliminary announcement of operation, etc., the color of the back light section prepared in the flesh side of the liquid crystal display section is one fixed color.

[0003] By the way, mode changes (automatic course mode / liking mode of operation / oral consultation mode) increased, and it cut unintelligibly in which mode it would be during actuation in the above liquid crystal display sections recently. Moreover, in what has a memory according to individual, it was [ whose course is performed and ] hard to judge only by the display of the liquid crystal display section.

[0004] this invention being made in view of the point of description, and dividing the color of the back light section of an actuation machine according to the mode, and making it emit light -- free medical treatment -- let it be a technical problem to offer the actuation machine of the massage machine with which a person can check operating state visually and becomes more intelligible.

[0005]

[Means for Solving the Problem] In order to solve the above-mentioned technical problem the manipulator of the massage machine of this invention The automatic course mode in which two or more actuation set up beforehand is performed, and the liking mode of operation which performs favorite fixed actuation, free medical treatment -- the oral consultation course mode in which actuation is chosen by inputting a person's condition -- In the massage machine which has two or more modes of operation, such as a memory mode of operation to which the actuation which set up beforehand and was made to memorize is made to perform, and equipped the actuation machine with the back light section of an operating button, the liquid crystal display section, and the liquid crystal display section The back light section which carries out multicolor change lighting of the whole surface of the liquid crystal display section is arranged in the flesh side of the liquid crystal display section, and it is characterized by changing the color of the back light section according to two or more above-mentioned modes of operation. two or more modes of every [ thus, ] by carrying out -- the color of the back light section -- being changeable -- free medical treatment -- a person can check visually by the operating state or a one division in which mode, and becomes intelligible in which mode.

[0006] Moreover, it is also desirable that it is characterized by having the memory mode of operation which can memorize actuation, and changing the color of the back light section for every stored data according to an individual etc. in this case, free medical treatment -- the color of the back light section can be changed according to a person etc., and it is whose course visually -- etc. -- it can check at a glance.

[0007]

[Embodiment of the Invention] The massage machine has the automatic course mode in which two or more actuation set up beforehand is performed automatically, the

liking mode of operation which performs favorite fixed actuation, the oral-consultation course mode in which actuation is chosen by inputting condition, and the memory mode of operation to which the actuation which set up according to the individual etc. beforehand and was made to memorize is made to perform, and is controlled by the body microcomputer 20 to be shown in drawing 4 . that is, free medical treatment -- the Maine motor 21 which carries out a drive of a child etc., and free medical treatment -- the strength motor 22 and the free medical treatment which adjusts the strength of the massage by the child -- the width-of-face motor 23 and the free medical treatment which adjusts a child's width of face -- it changes so that a child may perform \*\*\*\* -- rubbing -- a clutch 24 and free medical treatment -- the beat clutch 25 which changes so that a child may perform a beat, and free medical treatment -- the vertical clutch 26 grade which changes so that a child may move up and down controls with a body microcomputer 20.

[0008] The actuation machine 1 which operates a massage machine contains the actuation machine microcomputer 27, and has connected the actuation machine microcomputer 27 and the body microcomputer 20. In the actuation vessel 1, it has the operating button A, and the actuation information on an operating button A is inputted into the actuation machine microcomputer 27. Moreover, it connects with the actuation machine microcomputer 27, and the liquid crystal display section 2 and the back light section 18 which were prepared in the actuation machine 1, and the LED action indication section 19 are also controlled. Moreover, on the actuation machine microcomputer 27, it has the memory section 28, and has come to be able to carry out the memory of the stored data which set up according to the individual etc. beforehand and was made to memorize.

[0009] The actuation machine 1 which operates a massage machine is constituted as shown in drawing 1 and drawing 2 . This actuation machine 1 is formed in the shape of [ oblong ] a rectangle, and has formed the liquid crystal display section 2 in the center section of this actuation machine 1. this liquid crystal display section 2 -- activity and free medical treatment -- a child's successive range and free medical treatment -- a child's location and the contents of a setting are displayed. And the operating button A is formed in the actuation machine 1 vertically and horizontally focusing on this liquid crystal display section 2.

[0010] There are various things in an operating button A, and close / OFF operating button 4, the halt operating button 5, \*\*\*\*\* 6, and the voice Nabih operating button 7 are formed in the left-hand side of the actuation machine 1. On the liquid crystal display section 2 of the actuation machine 1, the operating button 8 for whole

body automatic courses is formed, and there are acupressure course \*\*8a, KORI improvement course \*\*8b, recovery-from-fatigue course \*\*8c, 8d of whole body activity course \*\* etc., etc. in the operating button 8 for whole body automatic courses.

[0011] Acupressure actuation as basic actuation of a massage machine -- free medical treatment -- a child is gone up and down and moved to a lengthwise direction to the body -- Actuation grasping the body rubs, and it raising- operates [ software acupressure actuation and / of actuation ], and rubs. Lowering actuation, \*\*\*\* actuation, Rubbing, striking [ strike, / operate, and ] and actuation software \*\*\*\* actuation and free medical treatment on either side -- a child is gone up and down by turns -- Moreover, four whole body automatic courses gone up and down from the neck of the back, applying to the waist in which can operate by \*\*\*\*\*(ing) and it performs by operating the operating button 8 for whole body automatic courses combine these courses. The acupressure course performed by operating acupressure course \*\* 8a is the course in which it operates focusing on acupressure actuation, software acupressure actuation, and software acupressure \*\*\*\*\*. It rubs, and the KORI improvement course performed by operating KORI improvement course \*\* 8b raising- operates, it is rubbed and serves as lowering actuation, \*\*\*\* actuation, and actuation [ software-\*\*\*\*-operate, rub, \*\*\*\*\* and ] centering on actuation. The recovery-from-fatigue course performed by operating recovery-from-fatigue course \*\* 8c is the course in which it operates focusing on software acupressure actuation, software acupressure \*\*\*\*\* actuation, software \*\*\*\* actuation, software \*\*\*\* actuation, and software \*\*\*\*\* actuation. The whole body activity course performed by operating 8d of whole body activity course operating buttons is the course in which all actuation is operated uniformly.

[0012] The lid 9 which can be freely opened and closed on the right-hand side of the liquid crystal display section 2 of the actuation machine 1 is formed. On the lid 9, the oral consultation course selector button 10 which chooses an oral consultation course, the reclining operating button 12 which operates [ an operating button 11 and ] whether it puts down or not in the course strength which operates course strength, and the leg rest operating button 13 which operates whether a leg rest is used are formed. The operating button 14 for oral consultation courses is formed in the front face of a lid 9. There are fatigue operating button 14 of KORI fatigue operating button 14a [ of a neck ], KORI fatigue operating button 14b [ of a shoulder ], \*\*\*\*\* fatigue operating button 14c, waist and 14d of KORI operating buttons of the



buttocks, and the foot and the sole e, 14f of decision operating buttons etc., etc. as operating button 14 for oral consultation courses. Two or more course memory operating buttons 15 are formed in the right-hand side of the operating button 14 for oral consultation courses, and a user can carry out now actuation which set up and carried out memory according to the individual etc. beforehand by choosing the course memory operating button 15. Moreover, liking operating button 16 group which is fond in the field wide opened when a lid 9 is opened, and operates mode actuation is prepared.

[0013] Although the various operating buttons A are formed in the actuation machine 1 as mentioned above, the LED action indication section 19 which carries out action indication is built in the proper operating button A. It switches on the light, puts out the light or blinks, and this LED action indication section 19 displays operating state. Moreover, the actuation machine 1 is equipped with the loudspeaker 17 if needed, and the phonological representation which speaks about the contents currently controlled with voice, or is interlocked with lighting and the flashing condition of the LED action indication section 19 in an operating button A or the liquid crystal display section 2, and guides operating procedure with voice is carried out. As shown in drawing 3, the back light section 18 covering the whole surface of the liquid crystal display section 2 is arranged in the background of the liquid crystal display section 2 of the actuation machine 1. This back light section 18 changes the color in which it has come to be able to carry out multicolor change lighting, and the back light section 18 emits light for every modes, such as automatic course mode, a liking mode of operation, oral consultation course mode, and a memory mode of operation, and can display it now. Moreover, in this example, it has been made to make it into the same color as the back light section 18 as the above-mentioned LED action indication section 19 also emits light in a multicolor color. The color of 3 yuan of the LED action indication section is decided with the combination of a color LED.

[0014] In case the color of the back light section 18 is changed for every mode, for example, when the whole body automatic course operating button 8 is operated, the color of the back light section 18 is turned on in red. When the oral consultation course selector button 10 and the operating button 14 for oral consultation courses are operated, the color of the back light section 18 is turned on green. When liking operating button 16 group is operated, the color of the back light section 18 is turned on in yellow. moreover, the thing for which the color of the LED action indication section 19 of each \*\* 8, 10, 14, and 16 is made into the same color as the back light section 18 -- further -- free medical treatment -- a person checks operating state

clearly visually -- things can be carried out and it becomes easy to operate it.

[0015] Moreover, it sets in the oral consultation course mode in which the contents of a course are set up by actuation etc. The memory section 28 of the actuation machine microcomputer 27 is made to memorize two or more contents set up by the operating button 14 for oral consultation courses by the course memory operating button 15. In what has the function to which the same actuation can be carried out again changing the color of the back light section 18 for every course memory, and doubling the color of the LED action indication section 19 of the course memory operating button 15 with the color of the back light section 18 -- free medical treatment -- a person can check operating state clearly visually and it becomes easy to operate him.

[0016]

[Effect of the Invention] since invention of claim 1 of this invention arranges in the flesh side of the liquid crystal display section the back light section which carries out multicolor change lighting of the whole surface of the liquid crystal display section and the color of the back light section was changed according to two or more above-mentioned modes of operation -- two or more modes of every -- the color of the back light section -- being changeable -- free medical treatment -- a person can check visually by the operating state or a one division in which mode, and it is intelligible and becomes easy to carry out actuation in which mode

[0017] moreover -- since invention of claim 2 of this invention has the memory mode of operation which can memorize actuation and changed the color of the back light section for every stored data according to the individual etc. -- free medical treatment -- the color of the back light section can be changed according to a person etc., and it is whose course visually -- etc. -- it can check at a glance

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## DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]

[Drawing 1] It is a front view in the condition of having closed the lid of the actuation machine of an example of the gestalt of operation of this invention.

[Drawing 2] It is a front view in the condition of having opened the lid same as the above.

[Drawing 3] some actuation machines same as the above -- it is a notching side elevation.

[Drawing 4] It is a block diagram explaining control of a massage machine same as the

above.

[Description of Notations]

1 Actuation Machine

2 Liquid Crystal Display Section

18 Back Light Section

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